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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,234

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EXAMINER

WANG-HURST, KATHY W

ART UNIT

PAPER NUMBER

4173

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,234	<b>Applicant(s)</b> JUNG, WOOSUN	
	<b>Examiner</b> KATHY WANG-HURST	<b>Art Unit</b> 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/12/2006 and 6/26/2007</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Pedersen et al (WO 98/48396)**, cited in applicant's IDS, in view of **Ulrich (US 2005/0154527)**.

Regarding claim 1, Pedersen discloses a system for sending container information including information on a position and sealing state of a container, comprising: an electronic seal device provided in the container (**page 2 line 36-page 3 line3, data processing unit in each container**) and including a radio frequency communication module (**page 3 lines 9-15 activates the near field radio system**), and a relay (**page 6 line 25 relay station**) disposed in a container yard where containers are collected or on a transportation means that carries the containers (**Fig. 2 item 16 located in a container yard 14**), said relay including a radio frequency communication module capable of communicating with the electronic seal device (**page 6 line 27 radio connection 17 as shown in Fig. 2**), a positional information acquisition means capable of acquiring the positional information of the container, and a satellite communication

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module capable of performing a satellite communication **(page 3 line 1-7 determine position and communicate information via satellites).**

Pedersen fails to disclose an electronic device is an electronic seal device. **Ulrich** teaches a cargo tracking system in which an electronic seal device **([0019] and [0025])** is used not only to monitor the location but also to detect if the cargo is opened during the shipment. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a generic electronic monitoring device disclosed by Pedersen to an electronic seal device taught by Ulrich in order to expand the functionality of the monitoring device by tracking not only the location of the container but also the condition of the container.

Regarding claim 2, Pedersen discloses a system for sending container information including information on a position and sealing state of a container, comprising: an electronic device provided to the container and including a radio frequency communication module **(Page 2 line 36-page 3 line 15, data processing unit in each container communicating via satellite using radio connection);** a container information transceiver mounted to the container **(Page 3 lines 29-34 near field communication equipment on a plurality of storage devices)** and including a radio frequency communication module and a condition information acquisition module for acquiring condition information of the container **(Page 3 lines 29-34 set up radio connection to the position satellite and communications satellite);** a relay **(page 6 line 25 relay station)** disposed in a container yard where containers

are collected or on a transportation means that carries the containers(**Fig. 2 item 16 located in a container yard 14**), said relay including a radio frequency communication module capable of communicating with the electronic seal device and the container state information transceiver and a satellite communication module capable of performing a satellite communication(**Page 6 lines 24-31 communicate with satellite; and Fig. 2**); and

a positional information acquisition means capable of acquiring the positional information of the container(**Page 3 lines 1-7 determine position and communicate information via satellites**).

Pedersen fails to disclose an electronic device is an electronic seal device. **Ulrich** teaches a cargo tracking system in which an electronic seal device (**[0019] and [0025]**) is used not only to monitor the location but also to report to the central system if the cargo is opened during the shipment. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a generic electronic monitoring device disclosed by Pedersen to an electronic seal device taught by Ulrich in order to expand the functionality of the monitoring device by tracking not only the location of the container but also the condition of the container.

Regarding claim 3, Pedersen discloses a system for sending container information including information on a position and sealing state of a container, comprising: an electronic device provided to the container and including a radio frequency

communication module(**Page 2 line 36-page 3 line3, data processing unit communicates via satellite using radio connection**);

a container information transceiver mounted to the container(**Page 3 lines 29-34 near field communication equipment on a plurality of storage devices**), said container information transceiver including a condition information acquisition module for acquiring condition information of the container and a radio frequency communication module capable of performing a radio frequency communicating with the electronic seal device (**Page 3 lines 29-34**);

a relay (**page 6 line 25 relay station**) disposed in a container yard where containers are collected or on a transportation means that carries the containers, said relay including a radio frequency communication module capable of communicating with the container state information transceiver and a satellite communication module capable of performing a satellite communication(**Page 6 lines 24-31 communicate with satellite; and Fig. 2**); and

a positional information acquisition means mounted to at least one of the container information transceiver and the relay to be able to acquire the positional information of the container (**Page 3 lines 29-34; and Fig. 2**).

Pedersen fails to disclose an electronic device is an electronic seal device. **Ulrich** teaches a cargo tracking system in which an electronic seal device (**[0019] and [0025]**) is used not only to monitor the location but also to report to the central system if the cargo is opened during the shipment. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a generic

electronic monitoring device disclosed by Pedersen to an electronic seal device taught by Ulrich in order to expand the functionality of the monitoring device by tracking not only the location of the container but also the condition of the container.

Regarding claim 4, Pedersen discloses the system as claimed in claim 2 or 3, wherein the container information transceiver further comprises the satellite communication module capable of performing the satellite communication **(Page 3 lines 1-7 determine position and communicate information via satellites)**.

Regarding claim 5, Pedersen discloses the system as claimed in claim 4, wherein the container information transceiver sends the positional and condition information of the container to the satellite when the container information transceiver fails to communicate with the relay **(Page 3 lines 1-7 determine position and communicate information via satellites)**.

Regarding claim 6, Pedersen discloses the system as claimed in claim 1 or 2, wherein the electronic seal device transmits the container information to another electronic device located within a communication radius of the radio frequency communication module of the electronic seal device when the electronic seal device fails to communicate with the relay **(Page 3 lines 9-18)**.

Pedersen fails to disclose an electronic device is an electronic seal device. **Ulrich** teaches a cargo tracking system in which an electronic seal device **([0019] and [0025])**

is used not only to monitor the location but also to report to the central system if the cargo is opened during the shipment. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a generic electronic monitoring device disclosed by Pedersen to an electronic seal device taught by Ulrich in order to expand the functionality of the monitoring device by tracking not only the location of the container but also the condition of the container.

Regarding claim 7, Pedersen discloses the system as claimed in claim 3, wherein the container information transceiver transmits the container information to another container information transceiver located within a communication radius of the radio frequency communication module of the container information transceiver when the container information transceiver fails to communicate with the relay (**Page 3 lines 9-18**).

Regarding claim 8, Pedersen discloses the system as claimed in any one of claims 1 to 3, wherein the relay is arranged in at least one of a vehicle, a train, an airplane and a container yard (**page 6 line 25 relay station and Fig 1 vehicle, a train and a container yard**).

Regarding claim 9, Pedersen discloses a container tracking system for tracking container information including information on a position and sealing state of a container, comprising:



an electronic device provided to the container and including a radio frequency communication module (**Page 2 line 36-page 3 line3, data processing unit in each container**);

a relay (**page 6 line 25 relay station**) disposed in a container yard where containers are collected or on a transportation means that carries the containers, said relay including a radio frequency communication module capable of communicating with the electronic seal device, a satellite communication module for performing a satellite communication, and a positional information acquisition means capable of acquiring the positional information of the container (**Page 6 lines 24-31 communicate with satellite**);

Pedersen fails to disclose an electronic device is an electronic seal device. **Ulrich** teaches a cargo tracking system in which an electronic seal device (**[0019] and [0025]**) is used not only to monitor the location but also to report to the central system if the cargo is opened during the shipment. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a generic electronic monitoring device disclosed by Pedersen to an electronic seal device taught by Ulrich in order to expand the functionality of the monitoring device by tracking not only the location of the container but also the condition of the container.

In addition, Pedersen fails to explicitly disclose a control center and sealing state of the container. **Ulrich** teaches a cargo tracking system in which a control center (**[0062] a centralized computer system**) including a base station communication unit for receiving the container information transmitted through a

satellite from a base station capable of performing a satellite communication with the satellite **([0025] communication via satellite)**, an information processing unit for processing the received container information **([0019] signals received are stored for processing, therefore processing unit)**, a client communication unit **(Fig. 9 item 102)**, client for communicating with a client terminal **(Fig. 9 items 102-104)**, and an information transmitting/receiving unit for sending the container information to the client terminal with the request from the client terminal for confirming the container information **([0072] transmitter/receiver; Fig. 9 item 108; [0022] client request)**, wherein the electronic seal device transmits the information on the sealing state of the container and sends the container information **([0025])**, including the information on the position and sealing state of the container **([0025])**, via the satellite communication module to the satellite and then to the base station **([0025])**, and the control center sends the container information to the client terminal with the request of the client terminal **(Table 1)**.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Pedersen et al (WO 98/48396)**, cited in applicant's IDS, in view of **Ulrich (US 2005/0154527)**, further in view of **Kovach (US 2004/0143505)**

Regarding claim 10, Pedersen discloses the system as claimed in claim 9 **(Page 1 lines 5-12)**, but fails to teach a seal scanner. Ulrich teaches a seal device **([0019])** but fails to teach a seal scanner. Kovach teaches an article tracking system in which a seal scanner **([0009])** using a radio frequency communication module communicating

**([0009])** with the electronic seal device **([0009])** and stores management information including an identification number (ID) of the container and an identification number (ID) of the electronic seal device **([0008] store unique identifier number and merchandise serial number)**.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gounder (US 20006/0164235) disclosed a cargo container locking system and method.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHY WANG-HURST whose telephone number is (571)270-5371. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571)272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHY WANG-HURST/  
Examiner, Art Unit 4173

/Lewis G. West/  
Primary Examiner, Art Unit 2618